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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Brad L. Grande

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EXAMINER

GETACHEW, ABIY

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/787,380	Applicant(s) GRANDE ET AL.	
	Examiner ABIY GETACHEW	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Arguments presented in the appeal brief filed on 04/07/2008 with respect to claims 1-20 have been fully considered and are persuasive. Therefore, the finality of the last office action is withdrawn. However, Applicant's arguments presented in the Appeal brief with respect to claim 1-20 are moot in view of the new ground(s) of rejection based on newly found prior Arts of Arnett et al. (US 6,078,661), Sanderson et al. (4,493,951), Sacca [US 6,876,742 B1], Hershberger et al. [US 5,654,984].

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being unpatentable over Arnett et al. (US 6,078,661) hereafter refer as Arnett.

Regarding claim 1, Arnett disclose a modem module (See figure 2 element 10) for connecting to a carrier assembly [Column 2 lines 57-67], comprising: circuitry for interfacing with a telephone line (figure 2 element 25, wire modular connectors for phone lines) and one or more solder pads (See figure 2 element 45, i.e. terminals are connected via a trace on the board 22 to the ground pad area 45 for connecting said modem module to said carrier assembly)

Regarding claim 2, Arnett disclose further comprising a tip/ring (figure 2 element 24) connector for interfacing with said telephone line (figure 2 element 25).

Regarding claim 3, Arnett disclose further comprising a connection to a tip/ring connector (figure 2, element 24). (See figure 2)

Regarding claim 4, Arnett disclose wherein said carrier assembly is a motherboard (see figure 2 element 22, i.e. motherboard is the central or primary circuit board making up a complex electronic system, such as a modern computer).

Regarding claim 5, Arnett disclose wherein said one or more solder pads are soldered to corresponding one or more solder pads (See figure 2 element 45) on said carrier assembly (figure 2 element 24).

Regarding claim 6, Arnett disclose wherein said modem assembly is fabricated on a printed circuit board (see figure 2 element 22, i.e. motherboard is the central or primary circuit board making up a complex electronic system, such as a modern computer).

Regarding claim 7, Arnett disclose wherein said modem assembly is an integrated device (See the Abstract, i.e. a network interface device includes a circuit board secured in the base. Integrated device defined as an electronic circuit-consisting of components and connectors-contained on a semiconductor chip).

Regarding claim 7, Arnett disclose

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanderson et al. (4,493,951) hereafter Sanderson in view of Arnett et al. (US 6,078,661) hereafter refer as Arnett.

Regarding claim 8, Sanderson disclose a method for fabricating a modem module [Column 1 lines 66-68 and Column 2, lines 1-2]

Sanderson does not expressly disclose circuitry on a printed circuit board for interfacing with a telephone line; providing one or more solder pads on said printed circuit board for connecting said modem module to said carrier assembly.

Arnett disclose circuitry for interfacing with a telephone line (figure 2 element 25, wire modular connectors for phone lines) and one or more solder pads (See figure 2 element 45, i.e. terminals are connected via a trace on the board 22 to the ground pad area 45 for connecting said modem module to said carrier assembly)

Sanderson and Arnett are analogous art because they are from the same field of endeavor of similar problem solving area, which is, a modem and/or an associated telephone line which are coupled together through a modular plug coupled to the modem and a modular jack coupled to the telephone line.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine circuitry on a printed circuit board in order to devices which are used to establish an interface between network lines as taught by Arnett.

Regarding claim 9, Sanderson as modified by Arnett discloses the apparatus as stated above, further shown by Arnett disclose further comprising a tip/ring (figure 2 element 24) connector for interfacing with said telephone line (figure 2 element 25).

Regarding claim 10, Sanderson as modified by Arnett discloses the apparatus as stated above, further shown by Arnett disclose further comprising a connection to a tip/ring connector (figure 2, element 24). (See figure 2)

Regarding claim 11, Sanderson as modified by Arnett discloses the apparatus as stated above, further shown by Arnett disclose wherein said carrier assembly is a motherboard (see figure 2 element 22, i.e. motherboard is the central or primary circuit board making up a complex electronic system, such as a modern computer).

Regarding claim 12, Sanderson as modified by Arnett discloses the apparatus as stated above, further shown by Arnett disclose wherein said one or more solder pads are soldered to corresponding one or more solder pads (See figure 2 element 45) on said carrier assembly (figure 2 element 24).

Regarding claim 13, Sanderson as modified by Arnett discloses the apparatus as stated above, further shown by Arnett disclose wherein said modem assembly is fabricated on a printed circuit board (see figure 2 element 22, i.e. motherboard is the central or primary circuit board making up a complex electronic system, such as a modern computer).

6. Claims 14-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sacca [US 6,876,742 B1] in views of Hershbarger et al. [US 5,654,984] hereafter Hershbarger.

Regarding claim 14, Sacca disclose a printed circuit board, comprising: modem circuitry (figure 1 element 106) for interfacing a telephone line (figure 1 element 202) one or more solder pads (figure 1 element 104) for connecting said modem

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circuitry (figure 1 element 106) to a carrier assembly. [Sacca teaches that a diode bridge (104) has a pair of terminals for coupling data signals to a network connection and another pair of terminals for coupling the interface circuitry]

Sacca does not expressly disclose the carrier assembly.

Hershbarger et al teach a modem system shown in (Figures 2-4, having node (201 and 202)), wherein the modem connector providing a direct wire connection through wires (213, 214, 215) to the digital isolation barrier and capable of providing the direct wire connection through wires between the digital isolation barrier and the host connector, wherein the isolation barrier isolates the modem connector from the line side circuitry [Figures . 2-4; column 4, lines 34-58; column 5, line 54 to column. 6, line 13]. It is nevertheless a teaching to one of ordinary skill in the art to apply this to other applications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Hershbarger with Sacca in order to provide carrier assembly and connection details using direct wires between the modem connector of the nodes (201 and 202), and between the digital isolation barrier (200) and the host connector (220) to enable one to make and use the claimed invention of Sacca.

Regarding claims 15 and 16, Sacca as modified by Hershbarger discloses the apparatus as stated above, further shown by Hershbarger disclose a tip/ ring (figure 2 element 209) connect for interfacing with said telephone line (See figure 2 element 209 , i.e. telephone line 209, which comprises tip and ring conductors)

Regarding claims 17 and 19, Sacca as modified by Hershberger discloses the apparatus as stated above, further shown by Hershberger disclose carrier assembly is a motherboard (201 and 202, i.e. motherboard is the central or primary circuit board making up a complex electronic system, such as a modern computer)

Regarding claim 18, Sacca disclose a diode bridge (104) has a pair of terminals for coupling data signals to a network connection and another pair of terminals for coupling the interface circuitry.

Regarding claim 20, Sacca as modified by Hershberger discloses the apparatus as stated above, further shown by Hershberger disclose wherein said modem assembly is an integrated device (See figure 2, i.e. figure 2 shows the two mounting blocks carry different types of electronic components. Integrated device defined as an electronic circuit-consisting of components and connectors-contained on a semiconductor chip).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIY GETACHEW whose telephone number is (571)272-6932. The examiner can normally be reached on Monday to Friday 8Am to 4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DEAN REICHARD can be reached on (571)272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy C. Norris/
Primary Examiner, Art Unit 2841

Abiy Getachew
Examiner
Art Unit 2841

A.G.
August 16, 2008